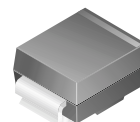


MBRS130

Features

- Compact Surface Mount with J-bend Leads (SMB)
- 1.5 Watt Power Dissipation Package
- 1.0 Ampere, Forward Voltage Less than 550mV



SMB (DO-214AA)

Color Band Denotes Cathode
Mark: B130

Schottky Rectifier

Absolute Maximum Ratings * $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|-------------|---|-------------|------------------|
| V_{RRM} | Maximum Repetitive Reverse Voltage | 30 | V |
| $I_{F(AV)}$ | Average Rectified Forward Current @ $T_L = 120^\circ\text{C}$ | 1.0 | A |
| I_{FSM} | Non-repetitive Peak Forward Surge Current (8.3ms, Single half sine wave) | 40 | A |
| T_{STG} | Storage Temperature Range | -65 to +150 | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | -65 to +125 | $^\circ\text{C}$ |

* These ratings are limiting values above which the serviceability of the diode may be impaired.

Thermal Characteristics

| Symbol | Parameter | Value | Units |
|-----------------|-------------------------------------|-------|---------------------------|
| $R_{\theta JL}$ | Thermal Resistance Junction to Lead | 12 | $^\circ\text{C}/\text{W}$ |

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Min. | Max. | Units |
|--------|---|------|------|-------|
| V_F | Forward Voltage @ $I_F = 1.0\text{A}$ | | 550 | mV |
| I_R | Reverse Leakage $V_R = 30\text{V}$ | | 1.0 | mA |
| | $V_R = 30\text{V}, T_A = 100^\circ\text{C}$ | | 10 | mA |

Typical Characteristics

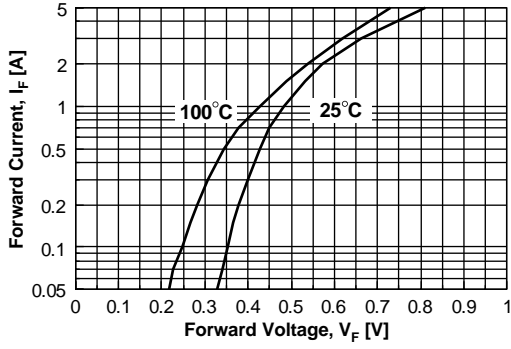


Figure 1. Forward Voltage Characteristics

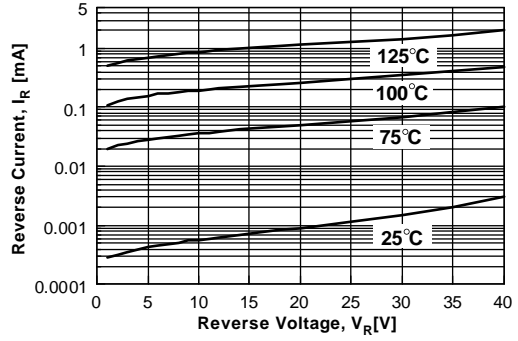


Figure 2. Reverse Current vs Reverse Voltage

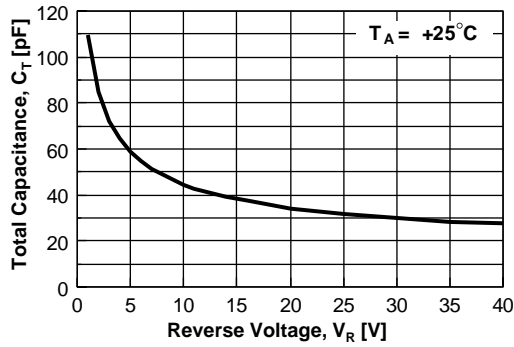


Figure 3. Total Capacitance

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